

R E P O R T

OFF-SITE MONITORING WELL DESTRUCTION REPORT

**FORMER BP SITE #11146
1096 OAK GROVE ROAD
CONCORD, CALIFORNIA**

*Prepared for
RM*

February 10, 2006

URS

URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612-1924



February 10, 2006

Mr. George Leyva
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

**Re: Off-Site Monitoring Well Destruction Report
Former BP Service Station #11146
1096 Oak Grove Road,
Concord, California
RWQCB File No: 07-0203**

Dear Mr. Leyva:

On behalf of the Remediation Management (RM – a BP affiliated company), URS Corporation (URS) is submitting this *Off-Site Monitoring Well Destruction Report* for the former BP service station located at 1096 Oak Grove Road, in Concord, California (the Site). The scope of work for the Site included the destruction of one recovery well (RW-1) and four monitoring wells (AW-5 through AW-8). Wells MW-1 through MW-4, RW-2 and RW-3 were previously destroyed and described in a report titled *On-Site Monitoring Well Destruction Report* (dated March 29, 2005). The locations of the recovery and monitoring wells are shown in Figure 1.

Prior to initiating field activities, URS obtained well destruction permits from the Contra Costa County Environmental Health Division (CCCEHD), created a site-specific Health and Safety Plan (HASP) describing hazards associated with the proposed work, and conducted a subsurface utility clearance. The utility clearance included notifying Underground Service Alert (USA) of the pending work a minimum of 48 hours prior to initiating the field investigation, and securing the services of a private utility locating company to confirm the absence of underground utilities at each well location. Copies of the well abandonment permits are included in Appendix A.

Two of the five wells (AW-6, AW-7) were over-drilled using a hollow-stem auger drill rig to the total depth of the well casings. The boreholes were then backfilled with neat cement grout using a tremie pipe. The remaining three off-site wells (AW-5, AW-8, & RW-1) were pressure grouted following the approval of a variance from the CCCEHD. At all of the well locations, the well box was removed and the ground surface was restored in kind. All of the well destructions were performed under the consent and approval of the CCCEHD. Copies of Monitoring Well logs and Well Completion Report submitted to the Department of Water Resources (DWR) are included in Appendix B. Details of the field activities are presented on the following page.

URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612-1924
Tel: 510.893.3600
Fax: 510.874.3268



Mr. George Leyva
February 10, 2006
Page 2 of 3

Personnel Present: October 10 & 11, 2005: URS Geologists Andrew Fowler & Scott Robinson.
October 31, 2005: URS Geologists Andrew Fowler, Shannon Couch, Donna Cospers (E.I.T.).
January 26, 2006: URS Geologists Kirk Martin & Lynelle Onishi.
Personnel working under the supervision of Donna Cospers, project manager.

Permits: CCCEHD Permit numbers: WP0003908 (RW-1), WP00004890 (AW-5), WP00004891 (AW-6), WP00004892 (AW-7), WP00004893 (AW-8).

Drilling Companies: Gregg Drilling of Martinez, California (C-57 License # 485165) (October 10/11, 2005 & January 26, 2006).
Woodward Drilling (C-57 License # 710079) (October 31, 2005).

Drilling Dates: October 10, 11, & 31, 2005. January 26, 2006.

Number of Wells: Five: AW-5 through AW-8, and RW-1.

Well Depths: 20 feet bgs (AW-5, AW-6, AW-7, AW-8); 28 feet bgs (RW-1).

Method of Destruction: Drill rig equipped with hollow-stem augers was used to over-drill wells AW-6 & AW-7. The boreholes were backfilled with neat cement grout. Wells AW-5, AW-8, and RW-1 were pressure grouted.

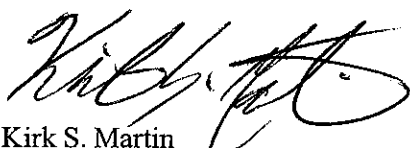
Soil and Water Handling: Soil cuttings produced during drilling activities were drummed in five DOT 17H 55-gallon drums. Waste was characterized by Sequoia Analytical Laboratories and will be removed by Dillard Environmental.



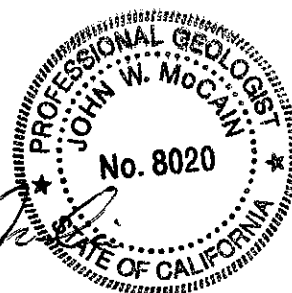

Mr. George Leyva
February 10, 2006
Page 3 of 3

We trust this document meets with your approval. Please do not hesitate to contact us at (510) 893-3600 with any questions or comments.

Sincerely,
URS CORPORATION



Kirk S. Martin
Geologist

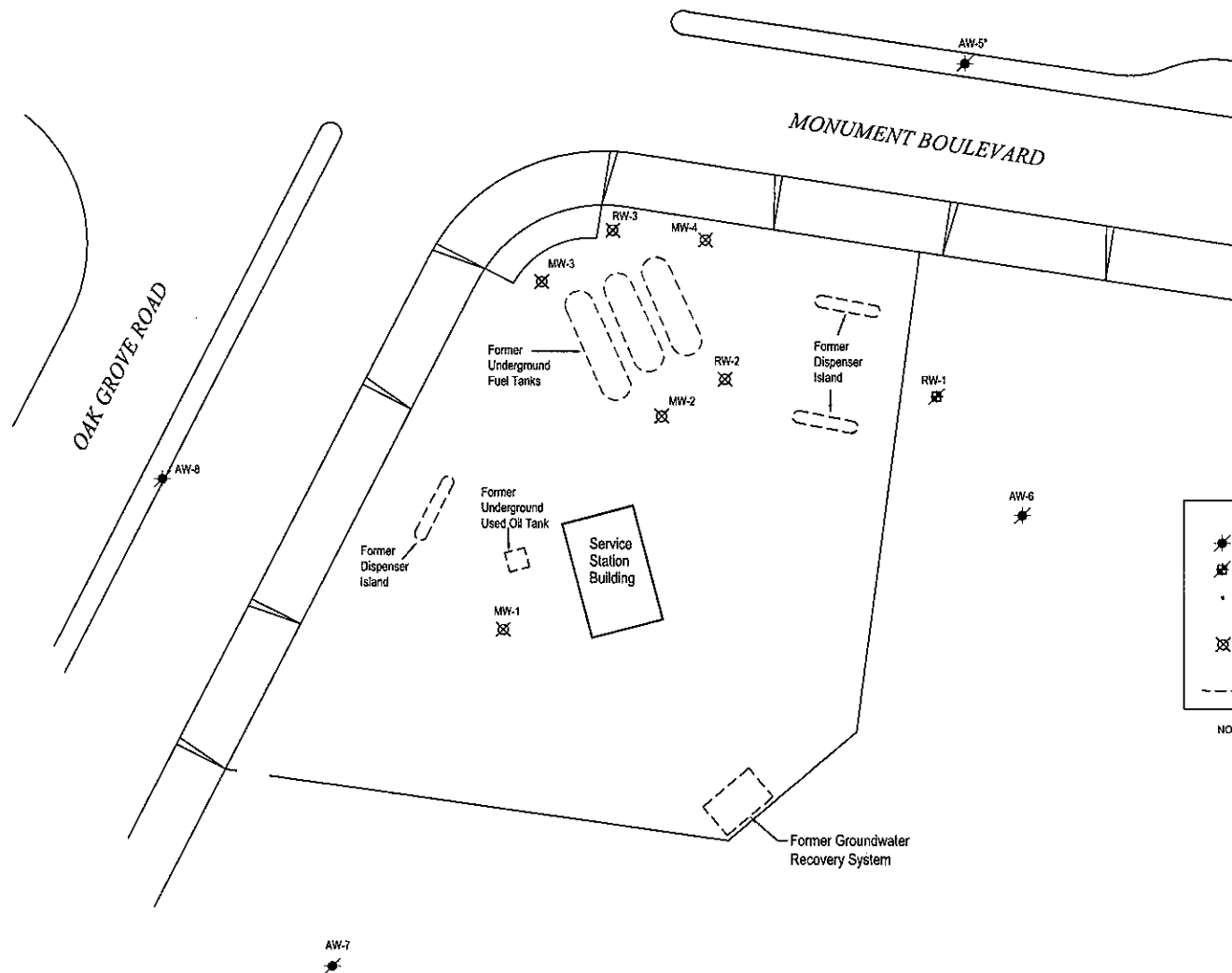


John McCain, P.G.
Geologist

Enclosures: Figure 1: Site Map
Appendix A: Completed Well Abandonment Permits- Contra Costa County Environmental Health Services
Appendix B: Well Completion Reports and Well Logs

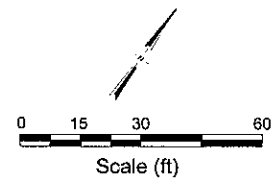
cc: Mr. Chuck Carmel, Atlantic Richfield Company (RM), electronic copy uploaded to ENFOS
Ms. Susan Loyd, Contra Costa County Health Services Division, 4333 Pacheco Boulevard, Martinez, CA 94533
Shelby Lathrop, ConocoPhillips, electronic copy uploaded to URS ftp server

Figure 1
Site Plan



EXPLANATION	
	Destroyed Monitoring Well Location (Oct. 2005 - Jan. 2006)
	Destroyed Groundwater Recovery Well Location (Oct. 2005)
	Monitoring well paved over during road improvement activity
	Destroyed Groundwater/Recovery Well (March 16 -17, 2005)
	Former Site Structures

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
 SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



URS	Project No. 38487364	SITE PLAN	FIGURE 1
	Former BP Service Station #11146 1096 Oak Grove Road Concord, California		

Appendix A
Contra Costa County Completed Well Abandonment Permits



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocoeh.org



Well Permit

WP0003908

PR Number: 22135

PE Number: 4368

Date Received: 28 FEB 05

Permit Number: 05M-1212

Permit Approved/Issued by: Ed P

Date Issued: 10/28/05

Environmental Health Specialist

NEW WELL	() SOIL BORINGS	WELL ABANDONMENT/REPAIR	REPAIR
----------	------------------	------------------------------------	--------

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: (2050 MONUMENT BLVD) 1096 OAK GROVE RD, CONCORD

APN: 129-170-021

Lot/Parcel #:

Subdivision #:

Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: WOODWARD DRILLING

Contact Person:

Phone #: 707-374-4300

FAX#: 707-374-4300

Consultant: URS

Contact Person: ANDREW FOWLER

Phone #: 510-893-3600

FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCOPHILLIPS / LIZ SEWELL

Owner Address: 76 BROADWAY

City/State/Zip: SACRAMENTO, CA 95818

Phone #: 916-558-7604

Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voice mail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____

Date: _____



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocbeh.org



Well Permit WP0004890

PR Number: 23861 PE Number: 4368
Date Received: 18 OCT 05 Permit Number: 05M-1774
Permit Approved/Issued by: [Signature] Date Issued: 10/28/05
Environmental Health Specialist

NEW WELL	() SOIL BORINGS	<input checked="" type="checkbox"/> WELL ABANDONMENT/AW/O	REPAIR
----------	------------------	---	--------

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD
APN: 129-170-021 Lot/Parcel #:
Subdivision #: Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: WOODWARD DRILLING Contact Person:
Phone #: 707-374-4300 FAX#: 707-374-5677
Consultant: URS CORP Contact Person: ANDREW FOWLER
Phone #: 510-893-3600 FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/SHELBY LATHROP
Owner Address: 76 BROADWAY
City/State/Zip: SACRAMENTO, CA 95818
Phone #: 916-558-7604 Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voice mail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____ Date: _____



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocceh.org



Well Permit WP0004890

PR Number: 23851

PE Number: 4368

Date Received: 2 AUG 05

Permit Number: 05M-1774

Permit Approved/Issued by: [Signature]Date Issued: 8/16/05

Environmental Health Specialist

NEW WELL	<input type="checkbox"/> SOIL BORINGS	<input type="checkbox"/> WELL ABANDONMENT (AW-5)	REPAIR
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The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD

APN: 129-170-017

Lot/Parcel #:

Subdivision #:

Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING & TESTING

Contact Person:

Phone #: 925-313-5800

FAX#: 925-313-0302

Consultant: URS CORPORATION

Contact Person:

Phone #: 510-893-3600

FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/LIZ SEWELL

Owner Address: 76 BROADWAY

City/State/Zip: SACRAMENTO, CA 95818

Phone #: 916-558-7604

Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voice mail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____

Date: _____



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocoeh.org



Well Permit

WP0004891

PR Number: 23862 PE Number: 4368
Date Received: 2 AUG 05 Permit Number: 05M-1775
Permit Approved/Issued by: [Signature] Date Issued: 8/16/05
Environmental Health Specialist

NEW WELL	<input checked="" type="checkbox"/> SOIL BORINGS	WELL ABANDONMENT (AW-6)	REPAIR
----------	--	-------------------------	--------

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD
APN: 129-170-017 Lot/Parcel #:
Subdivision #: Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING & TESTING Contact Person:
Phone #: 925-313-5800 FAX#: 925-313-0302
Consultant: URS CORPORATION Contact Person:
Phone #: 510-893-3600 FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/LIZ SEWELL
Owner Address: 76 BROADWAY
City/State/Zip: SACRAMENTO, CA 95818
Phone #: 916-558-7604 Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voice mail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____ Date: _____



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.cocoeh.org



Well Permit


WP0004892

PR Number: 23863

PE Number: 4368

Date Received: 2 AUG 05

Permit Number: 05M-1776

Permit Approved/Issued by: 

Date Issued: 8/16/05

Environmental Health Specialist

NEW WELL	<input checked="" type="checkbox"/> SOIL BORINGS	WELL ABANDONMENT (AW-7)	REPAIR
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The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD

APN: 129-170-017

Lot/Parcel #:

Subdivision #:

Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING & TESTING

Contact Person:

Phone #: 925-313-5800

FAX#: 925-313-0302

Consultant: URS CORPORATION

Contact Person:

Phone #: 510-893-3600

FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/LIZ SEWELL

Owner Address: 76 BROADWAY

City/State/Zip: SACRAMENTO, CA 95818

Phone #: 916-558-7604

Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voice mail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____

Date: _____



**CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION**
2120 DIAMOND BOULEVARD, SUITE 200
CONCORD, CA 94520
(925) 646-5225
www.ccoeh.org



Well Permit WP0004893

PR Number: 23864

PE Number: 4368

Date Received: 18 OCT 05

Permit Number: 05M-1777

Permit Approved/Issued by: [Signature]Date Issued: 10/28/05

Environmental Health Specialist

NEW WELL	() SOIL BORINGS	WELL ABANDONMENT (AW/B)	REPAIR
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The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD

APN: 129-170-021

Lot/Parcel #:

Subdivision #:

Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: WOODWARD DRILLING

Contact Person:

Phone #: 707-374-4300

FAX#: 707-374-5677

Consultant: URS CORP

Contact Person: ANDREW FOWLER

Phone #: 510-893-3800

FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/SHELBY LATHROP

Owner Address: 76 BROADWAY

City/State/Zip: SACRAMENTO, CA 95818

Phone #: 916-558-7604

Alternate Phone #:

Contact the Contra Costa County Environmental Health Division appointment desk and obtain a confirmed appointment time and date prior to any drilling construction or destruction of a well. **Voicemail messages are not acceptable.** The appointment desk sends confirmation via telephone or fax.

Well drillers must possess a valid C-57 license and must have on file a performance bond of \$5,000.00 with Contra Costa County before commencing with any well construction, destruction or repairs.

WELL PERMIT CONDITIONS:

1. Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
2. Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
3. Other: _____

Final Approval by: _____

Date: _____



CONTRA COSTA
ENVIRONMENTAL HEALTH DIVISION
 2120 DIAMOND BOULEVARD, SUITE 200
 CONCORD, CA 94520
 (925) 646-5225
 www.cocoeh.org



Well Permit

WP0004893

PR Number: 23864

PE Number: 4368

Date Received: 2 AUG 05

Permit Number: 05M-1777

Permit Approved/Issued by: [Signature]Date Issued: 8/16/05

Environmental Health Specialist

NEW WELL	() SOIL BORINGS	WELL ABANDONMENT (AW-8)	REPAIR
----------	------------------	-------------------------	--------

The issuance of this permit by Contra Costa County Environmental Health Division does not guarantee a satisfactory and an indefinite operation of any well. Permit expires in 180 calendar days from date of approval. Permits are non-transferable, and can be suspended or revoked. If more time is required for the project, a time extension may be granted if reasons warrant it in writing.

PROJECT SITE INFORMATION

Site Address: 1096 OAK GROVE RD, CONCORD

APN: 129-170-017

Lot/Parcel #:

Subdivision #:

Minor Subdivision #:

DRILLER / CONSULTANT INFORMATION

Driller: GREGG DRILLING & TESTING

Contact Person:

Phone #: 925-313-5800

FAX#: 925-313-0302

Consultant: URS CORPORATION

Contact Person:

Phone #: 510-893-3600

FAX#: 510-874-3268

LEGAL OWNER INFORMATION

Legal Owner Name: CONOCO PHILLIPS/LIZ SEWELL

Owner Address: 76 BROADWAY

City/State/Zip: SACRAMENTO, CA 95818

Phone #: 916-558-7604

Alternate Phone #:

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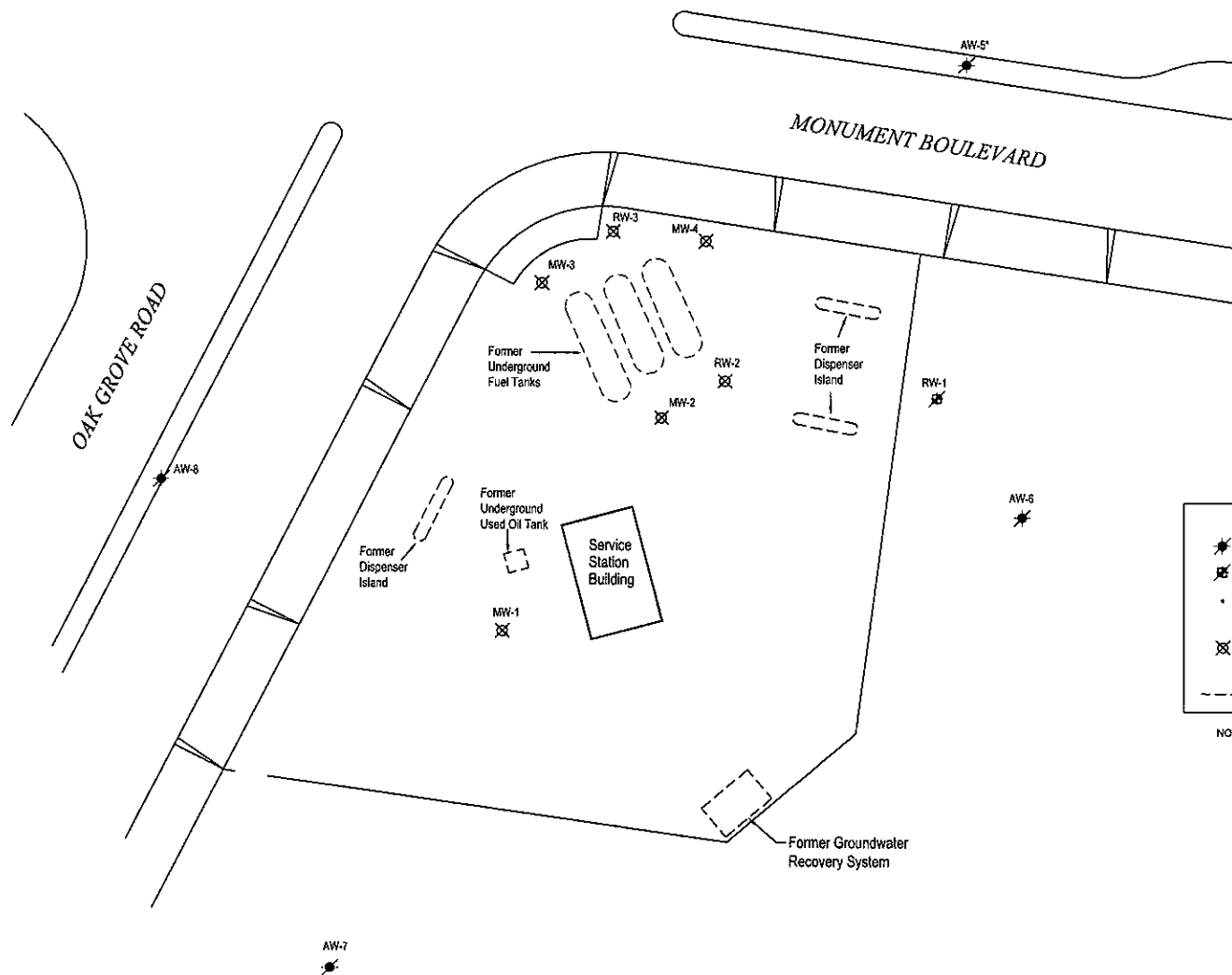
WELL PERMIT CONDITIONS:

- Proper annular seals and surface construction features are to be installed and required water analyses completed within 30 days of commencing drilling.
- Monitoring well/soil boring shall be destroyed pursuant to County regulations within 30 days of completing monitoring activities.
- Other: _____

Final Approval by: _____

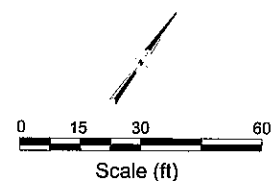
Date: _____

Appendix B
Well Completion Reports and Well Logs



EXPLANATION	
	Destroyed Monitoring Well Location (Oct. 2005 - Jan. 2006)
	Destroyed Groundwater Recovery Well Location (Oct. 2005)
	Monitoring well paved over during road improvement activity
	Destroyed Groundwater/Recovery Well (March 16 -17, 2005)
	Former Site Structures

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
 SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



URS	Project No. 38487364	SITE PLAN	FIGURE 1
	Former BP Service Station #11146 1096 Oak Grove Road Concord, California		

ALTON GEOSCIENCE LOG OF EXPLORATORY BORING



PROJECT NO. 30-0085-04 DATE DRILLED 10/30/91
 CLIENT Former Mobil Station 04-KP4
 LOCATION 1096 Oak Grove, Concord, CA
 LOGGED BY G. N-Westermann APPROVED BY _____

WELL NO.
RW-1

Page 1 of 1

FIELD SKETCH OF BORING LOCATION

SEE FIGURE 2

TOP OF CASING ELEVATION 47.42'

DRILLING METHOD HEX Hollow Stem Auger HOLE DIAM. 10"
 SAMPLER TYPE Split spoon
 CASING DATA 4" Sch. 40 PVC: 8' Blank, 20' Screen
 DRILLER Westex

BLOWS PER 1/2 FOOT (IN)	PID (PPM)	TPH-G (PPM)	SAMPLE	DEPTH (FT)	Well Construction	USCS	PROFILE	DEPTH TO WATER	17.00'	13.32'
								DATE	10/30/91	11/07/91
								TIME	9:07 AM	5:00 PM
DESCRIPTION										
				0				ASPHALT 3"; ROAD BASE 6"		
				2						
				4						
7,12, 12	0	ND		6	4" dia. Sch. 40 PVC Casing			silty CLAY: dark brown, damp; organics		
				8				CLAY: dark brown, damp, very stiff; slight silt		
9,11, 15	15	2.2		10				silty CLAY: dark brownish-gray, damp, very stiff; some sand		
				12				SAME: increasing sand, moist		
5,9,11	30	5.1		14				silty CLAY: dark brownish-gray, damp, very stiff		
8,15, 21	375	210		16		CL		CLAY: dark brownish-gray, damp, hard; slight silt		
6,12, 15	25	2.6		18				SAME: moist		
5,6,8				20	4" dia. Sch. 40 PVC 0.020" slotting			silty CLAY: dark brown, wet, stiff		
7,10, 10				22				silty CLAY: dark grayish-brown, wet, very stiff; some angular sand		
4,7,7				24				CLAY plug in auger		
10,10, 12				26				No recovery		
				28	End Cap					
				30				BOREHOLE TERMINATED AT 30 FEET BELOW GRADE		

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e036000

Page 1 of 1

Owner's Well Number AW-5

Date Work Began 01/26/2006

Date Work Ended 1/26/2006

Local Permit Agency Contra Costa County Environmental Health Division (CCCEHD)

Permit Number 05M-1774

Permit Date 10/28/05

DWR Use Only - Do Not Fill In

State Well Number/Site Number

Latitude

Longitude

APN/TRS/Other

Geologic Log

Orientation ☒ Vertical ☐ Horizontal ☐ Angle Specify _____
Drilling Method _____ Drilling Fluid _____

Depth from Surface

Feet to Feet

Description

Describe material, grain size, color, etc.

0 20 Pressure grouted well according to CCCEHD requirements following approval of a variance request.

Well Owner

Name Conoco Phillips/Liz Sewell

Mailing Address 76 Browday

City Sacramento

State CA

Zip 95818

Well Location

Address 1096 Oak Grove Road

City Concord

County Contra Costa

Latitude

N

Longitude

W

Datum

Decimal Lat.

Decimal Long.

APN Book 129

Page 170

Parcel 017

Township 120

Range 170

Section 017

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

See Attached Map

West

East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

- ☐ New Well
☐ Modification/Repair
☐ Deepen
☐ Other
☒ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

- ☐ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
☐ Cathodic Protection
☐ Dewatering
☐ Heat Exchange
☐ Injection
☒ Monitoring
☐ Remediation
☐ Sparging
☐ Test Well
☐ Vapor Extraction
☐ Other

Water Level and Yield of Completed Well

Depth to first water _____ (Feet below surface)

Depth to Static

Water Level _____ (Feet) Date Measured _____

Estimated Yield * _____ (GPM) Test Type _____

Test Length _____ (Hours) Total Drawdown _____ (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0 10	8.5	Blank	PVC Sch. 40		2		
10 20		Screen	PVC Sch. 40		2		0.020

Annular Material

Depth from Surface Feet to Feet	Fill	Description

Attachments

- ☒ Geologic Log
☒ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other _____

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief
Name Kirk Martin for Gregg Drilling & Testing

Person, Firm or Corporation

950 Howe Rd

Martinez

CA

94553

Signed

City

State

Zip

2/8/2006

485165

C-57 Licensed Water Well Contractor

Date Signed

C-57 License Number

ALTON GEOSCIENCE, Inc.
LOG OF EXPLORATORY
BORING

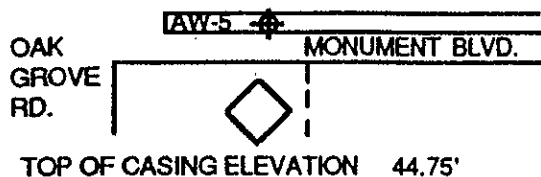


PROJECT NO. 30-085 DATE DRILLED 5/24/90
CLIENT MOBIL OIL CORPORATION
LOCATION MONUMENT AND OAK GROVE, CONCORD
LOGGED BY W. SHIPP APPROVED BY _____

BORING NO.

WELL NO.
AW-5

FIELD SKETCH OF BORING LOCATION



DRILLING METHOD CME 55, HSA HOLE DIAM. 8.5"
SAMPLER TYPE SPLIT SPOON
CASING DATA 2" Sch. 40 PVC; 10' solid, 10' perf
DRILLER SOILS EXPLORATION

BLOWS PER FOOT(N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	DESCRIPTION
			0	Christy Box			Asphalt over road base
			2				
12, 6, 9			4	2" sch. 40 PVC Casing	CL		SILTY CLAY: brown, moist, firm no sample recovery
8, 7, 14			6				
			8				SILTY CLAY: black, moist, very stiff, little very fine sands, slight odor
4, 7, 9			10		SC		CLAYEY SAND: olive, wet, loose, trace angular pebbles, slight odor
			12	2" sch. 40 PVC .020 Slot			Driller reported first appearance of water
4, 8, 10			14				
			16				
			18		CL		CLAY: light brown, moist, stiff, little silt, slight odor
4, 8, 12			20				SILTY CLAY: mottled (tan with brown patches), moist, stiff, little organics
			22	End Cap			BOREHOLE TERMINATED AT 20'
			24				
			26				
			28				
			30				
			32				
			34				

Portland Cement
 Sand #3 Lonestar
 Bentonite

Sample
 Driven interval
 Water level

File Original with DWR

State of California

Refer to Instruction Pamphlet
No. e036005

Page 1 of 1

Owner's Well Number AW-6

Date Work Began 10/10/05 Date Work Ended 10/11/2005


Local Permit Agency Contra Costa County Environmental Health Division (CCCEHD)

Permit Number 05M-1775

Permit Date 8/16/05

DWR Use Only -- Do Not Fill In														
State Well Number/Site Number														
						N								
Latitude							Longitude							
APN/TRS/Other														

[illegible]

Well Owner			
Name <u>Conoco Phyllips/Liz Sewell</u>			
Mailing Address <u>76 Broadway</u>			
City <u>Sacramento</u>		State <u>CA</u>	Zip <u>95818</u>
Well Location			
Address <u>1096 Oak Grove Road</u>			
City <u>Concord</u>		County <u>Contra Costa</u>	
Latitude	_____	N Longitude	_____ W
_____ Deg.	_____ Min.	_____ Sec.	_____ Deg.
Datum _____		Decimal Lat. _____	
Decimal Long. _____			
APN Book <u>129</u>	Page <u>170</u>	Parcel <u>017</u>	
Township <u>129</u>	Range <u>170</u>	Section <u>017</u>	
Location Sketch		Activity	
(Sketch must be drawn by hand after form is printed.)			
North		<input type="radio"/> New Well <input type="radio"/> Modification/Repair <input type="radio"/> Deepen <input type="radio"/> Other _____ <input checked="" type="radio"/> Destroy Describe procedures and materials under "GEOLOGIC LOG"	
		Planned Uses	
West		<input type="radio"/> Water Supply <input type="checkbox"/> Domestic <input type="checkbox"/> Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="radio"/> Cathodic Protection <input type="radio"/> Dewatering <input type="radio"/> Heat Exchange <input type="radio"/> Injection <input checked="" type="radio"/> Monitoring <input type="radio"/> Remediation <input type="radio"/> Sparging <input type="radio"/> Test Well <input type="radio"/> Vapor Extraction <input type="radio"/> Other _____	
South			
Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.			
Water Level and Yield of Completed Well			
Depth to first water _____		(Feet below surface)	
Depth to Static _____			
Water Level _____	(Feet)	Date Measured _____	
Estimated Yield * _____	(GPM)	Test Type _____	
Test Length _____	(Hours)	Total Drawdown _____	(Feet)
*May not be representative of a well's long term yield.			

[illegible]

Attachments		Certification Statement			
<input checked="" type="checkbox"/> Geologic Log	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name <u>Kirk Martin for Gregg Drilling & Testing</u> <u>950 Howe Rd</u> Person, Firm or Corporation Address Signed <u>[Signature]</u> City <u>Martinez</u> CA <u>94553</u> C-57 Licensed Water Well Contractor Date Signed <u>2/8/2006</u> 485165 C-57 License Number				
<input checked="" type="checkbox"/> Well Construction Diagram					
<input type="checkbox"/> Geophysical Log(s)					
<input type="checkbox"/> Soil/Water Chemical Analyses					
<input type="checkbox"/> Other _____					
Attach additional information, if it exists.					

ALTON GEOSCIENCE, Inc.
LOG OF EXPLORATORY
BORING



PROJECT NO. 30-085 DATE DRILLED 5/24/90

CLIENT Former Mobil Station 04-KP4

LOCATION Monument and Oak Grove, Concord, CA

LOGGED BY W. Shipp APPROVED BY _____

WELL NO.
AW-6

FIELD SKETCH OF BORING LOCATION

OAK
GROVE
RD.

MONUMENT BLVD.



AW-6

TOP OF CASING ELEVATION 45.17'

DRILLING METHOD CME 55, Hollow stem auger HOLE DIAM. 8.5"

SAMPLER TYPE Split Spoon

CASING DATA 2" Sch. 40 PVC; 10' solid, 10' perf

DRILLER Soils Exploration

BLOWS PER FOOT (in)	CGI (ppm)	SAMPLE	DEPTH	Well Construction	USCS	PROFILE	DESCRIPTION
			0	Christy Box			Asphalt over road base
			2				
			4				silty CLAY: black, moist, firm
4,5,7	0		6	2" dia. Sch. 40 PVC casing	CL		silty CLAY: black, moist, stiff
			8				
2,5,7	0		10				sandy CLAY: olive, moist, stiff; little silts Driller reported first appearance of water
			12	2" dia. sch. 40 PVC			
			14	0.020" slotting			
4,6,8	0		16				silty CLAY: black, moist, stiff
			18				
4,7,13			20				silty CLAY: mottled (tan and brown), moist, stiff; little very fine-grained sands and organics
			22	End Cap			BOREHOLE TERMINATED AT 20 FEET BELOW GRADE.
			24				
			26				
			28				
			30				
			32				
			34				

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet
No. e036006

Page 1 of 1

Owner's Well Number AW-7

Date Work Began 10/10/05 Date Work Ended 10/11/2005

Local Permit Agency Contra Costa County Environmental Health Division (CCCEHD)

Permit Number 05M-1776

Permit Date 8/16/05

DWR Use Only – Do Not Fill In											
State Well Number/Site Number											
					N						W
Latitude						Longitude					
APN/TRS/Other											

[illegible]

Well Owner			
Name <u>Conoco Phyllips/Liz Sewell</u>			
Mailing Address <u>76 Broadway</u>			
City <u>Sacramento</u>		State <u>CA</u>	Zip <u>95818</u>
Well Location			
Address <u>1096 Oak Grove Road</u>			
City <u>Concord</u>		County <u>Contra Costa</u>	
Latitude	Deq. Min. Sec.	N Longitude	Deq. Min. Sec. W
Datum _____		Decimal Lat. _____	
Decimal Long. _____			
APN Book <u>129</u>	Page <u>170</u>	Parcel <u>017</u>	
Township <u>12N</u>	Range <u>4E</u>	Section <u>017</u>	
Location Sketch		Activity	
(Sketch must be drawn by hand after form is printed.)		<input type="radio"/> New Well	
North		<input type="radio"/> Modification/Repair	
See Attached Map		<input type="radio"/> Deepen	
		<input type="radio"/> Other _____	
		<input checked="" type="radio"/> Destroy	
		Describe procedures and materials under "GEOLOGIC LOG"	
Planned Uses			
<div style="display: flex; justify-content: space-between;"> West East </div>		<input type="radio"/> Water Supply	
		<input type="checkbox"/> Domestic <input type="checkbox"/> Public	
		<input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial	
		<input type="radio"/> Cathodic Protection	
		<input type="radio"/> Dewatering	
		<input type="radio"/> Heat Exchange	
		<input type="radio"/> Injection	
		<input checked="" type="radio"/> Monitoring	
		<input type="radio"/> Remediation	
		<input type="radio"/> Sparging	
South		<input type="radio"/> Test Well	
		<input type="radio"/> Vapor Extraction	
		<input type="radio"/> Other _____	
<small>Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.</small>			
Water Level and Yield of Completed Well			
Depth to first water _____ (Feet below surface)			
Depth to Static _____			
Water Level _____ (Feet)		Date Measured _____	
Estimated Yield * _____ (GPM)		Test Type _____	
Test Length _____ (Hours)		Total Drawdown _____ (Feet)	
*May not be representative of a well's long term yield.			

[illegible]

Attachments <input checked="" type="checkbox"/> Geologic Log <input checked="" type="checkbox"/> Well Construction Diagram <input type="checkbox"/> Geophysical Log(s) <input type="checkbox"/> Soil/Water Chemical Analyses <input type="checkbox"/> Other _____ Attach additional information, if it exists.		Certification Statement I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name <u>Kirk Martin for Gregg Drilling & Testing</u> <div> <div> <u>950</u> Person, Firm or Corporation <u>Howe Rd</u> Address <u>Martinez</u> City </div> <div> <u>CA</u> State <u>94553</u> Zip </div> </div> Signed <u>Kirk Martin</u> Date Signed <u>2/8/2006</u> C-57 Licensed Water Well Contractor C-57 License Number _____			
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ALTON GEOSCIENCE, Inc.
LOG OF EXPLORATORY
BORING



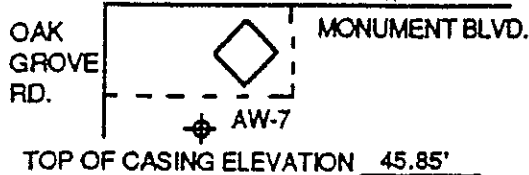
PROJECT NO. 30-085 DATE DRILLED 5/24/90
CLIENT MOBIL OIL CORPORATION
LOCATION MONUMENT AND OAK GROVE, CONCORD
LOGGED BY W. SHIPP APPROVED BY _____

BORING NO.

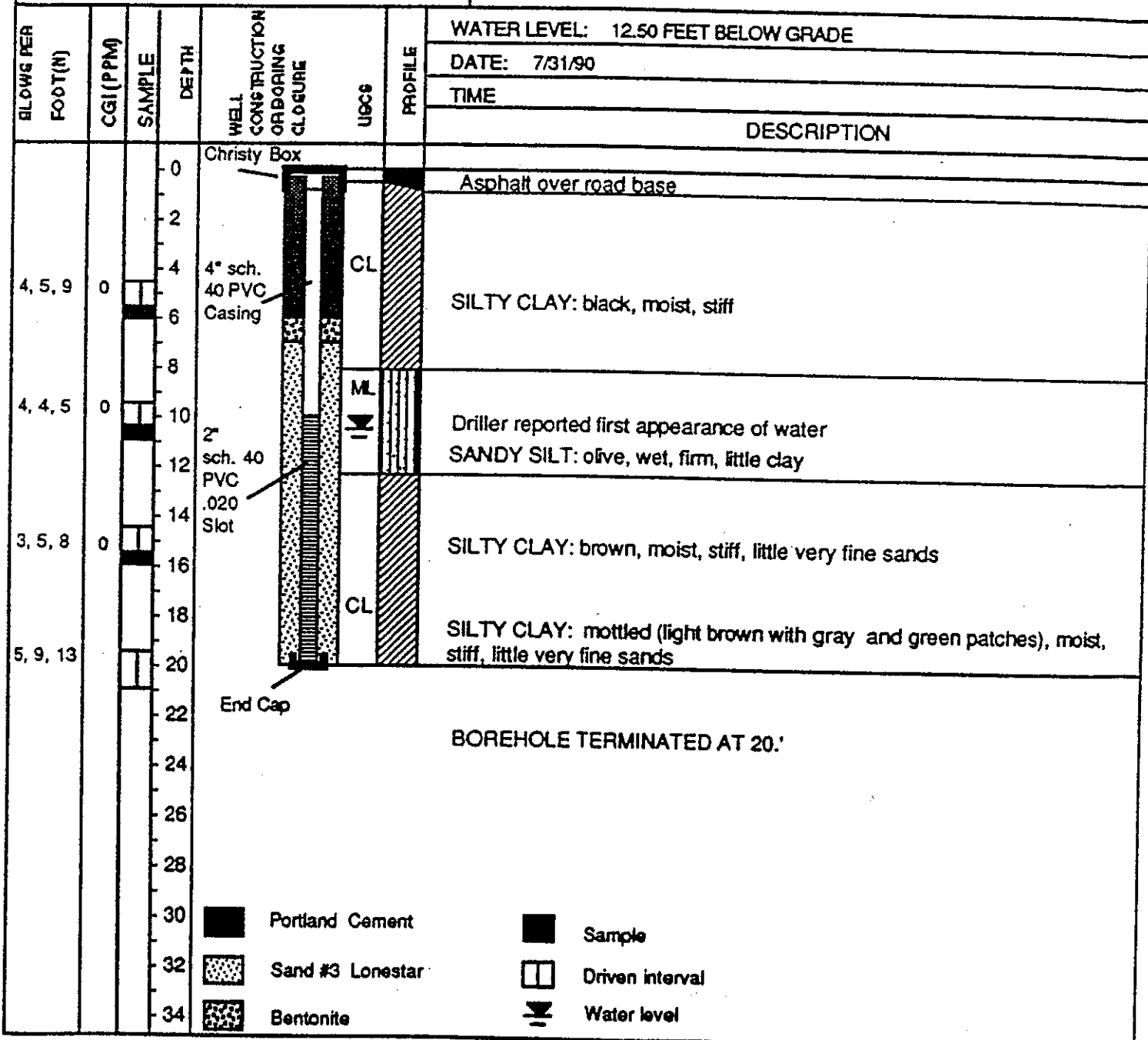
WELL NO.

AW-7

FIELD SKETCH OF BORING LOCATION



DRILLING METHOD CME 55, HSA HOLE DIAM. 8.5"
SAMPLER TYPE SPLIT SPOON
CASING DATA 2" Sch. 40 PVC; 10' solid, 10' perf
DRILLER SOILS EXPLORATION



File Original with DWR

State of California

Refer to Instruction Pamphlet

No. e036003

Page 1 of 1

Owner's Well Number AW-8

Date Work Began 10/31/2005

Date Work Ended 10/31/2005

Local Permit Agency Contra Costa County Environmental Health Division (CCCEHD)

Permit Number 05M-1777

Permit Date 10/28/05

DWR Use Only – Do Not Fill In										
State Well Number/Site Number										
Latitude					N	Longitude				W
APN/TRS/Other										

[illegible]

Well Owner			
Name <u>Conoco Phyllips/Liz Sewell</u>			
Mailing Address <u>76 Broadway</u>			
City <u>Sacramento</u>		State <u>CA</u>	Zip <u>95818</u>
Well Location			
Address <u>1096 Oak Grove Road</u>			
City <u>Concord</u>		County <u>Contra Costa</u>	
Latitude _____		N Longitude _____ W	
_____ Deg.	_____ Min.	_____ Sec.	_____ Deg. _____ Min. _____ Sec.
Datum _____		Decimal Lat. _____ Decimal Long. _____	
APN Book <u>129</u>	Page <u>170</u>	Parcel <u>021</u>	
Township <u>120</u>	Range <u>170</u>	Section <u>021</u>	
Location Sketch		Activity	
(Sketch must be drawn by hand after form is printed.)		<input type="radio"/> New Well <input type="radio"/> Modification/Repair <input type="radio"/> Deepen <input type="radio"/> Other _____ <input checked="" type="radio"/> Destroy Describe procedures and materials under "GEOLOGIC LOG"	
North			
<div style="border: 1px solid black; height: 150px; position: relative;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; opacity: 0.3; pointer-events: none;"> See Attached Map </div> </div>			
West	East	Planned Uses	
South <small>Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.</small>		<input type="radio"/> Water Supply <input type="checkbox"/> Domestic <input type="checkbox"/> Public <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="radio"/> Cathodic Protection <input type="radio"/> Dewatering <input type="radio"/> Heat Exchange <input type="radio"/> Injection <input checked="" type="radio"/> Monitoring <input type="radio"/> Remediation <input type="radio"/> Sparging <input type="radio"/> Test Well <input type="radio"/> Vapor Extraction <input type="radio"/> Other _____	
Water Level and Yield of Completed Well			
Depth to first water _____ (Feet below surface)			
Depth to Static _____			
Water Level _____ (Feet)		Date Measured _____	
Estimated Yield * _____ (GPM)		Test Type _____	
Test Length _____ (Hours)		Total Drawdown _____ (Feet)	
*May not be representative of a well's long term yield.			

[illegible]

Attachments		Certification Statement			
<input checked="" type="checkbox"/> Geologic Log <input checked="" type="checkbox"/> Well Construction Diagram <input type="checkbox"/> Geophysical Log(s) <input type="checkbox"/> Soil/Water Chemical Analyses <input type="checkbox"/> Other _____	I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief Name <u>Kirk Martin for Gregg Drilling & Testing</u> Person, Firm or Corporation <u>950 Howe Rd</u> Martinez CA <u>94553</u> Address City State Zip Signed <u>[Signature]</u> 2/8/2006 C-57 Licensed Water Well Contractor Date Signed C-57 License Number				
Attach additional information, if it exists.					

ALTON GEOSCIENCE, Inc.
LOG OF EXPLORATORY
BORING



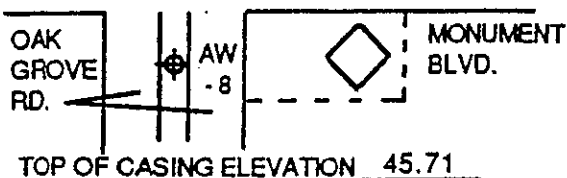
PROJECT NO. 30-085 DATE DRILLED 5/24/90
CLIENT MOBIL OIL CORPORATION
LOCATION MONUMENT AND OAK GROVE, CONCORD
LOGGED BY W. SHIPP APPROVED BY _____

BORING NO.

WELL NO.

AW-8

FIELD SKETCH OF BORING LOCATION



DRILLING METHOD CME 55, HSA HOLE DIAM. 8.5"
SAMPLER TYPE SPLIT SPOON
CASING DATA 2" Sch. 40 PVC; 10' solid, 10' perf
DRILLER SOILS EXPLORATION

BLOWS PER FOOT(N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	DESCRIPTION
			0	Christy Box			Brick and asphalt over road base
			2				
			4			CL	SILTY CLAY: black, some very fine sands
3, 7, 10	0		6	2" sch. 40 PVC Casing			SILTY CLAY: black, firm, some very fine sands
			8				SILTY CLAY: black, moist, firm, some very fine sands
4, 5, 8	0		10				
			12	2" sch. 40 PVC .020 Slot	ML		Driller reported first appearance of water SILTY SAND: olive, wet, little clay
4, 5, 6	0		14				SILTY CLAY: mottled (brown with tan patches), stiff
			16			CL	
			18				SILTY CLAY: mottled (brown with red-brown patches), stiff, moist, little sands and organics
5, 11, 14			20				
			22	End Cap			BOREHOLE TERMINATED AT 20.'
			24				
			26				
			28				
			30				
			32				
			34				



Portland Cement



Sample



Sand #3 Lonestar



Driven interval



Bentonite



Water level